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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/576,502	04/18/2006	Maurizio Marcacci	163700	3452
7590 James V Costigan Hedman & Costigan 1185 Avenue of the Americas New York, NY 10036-2601			EXAMINER BROWN, DREW J	
			ART UNIT 3616	PAPER NUMBER
			MAIL DATE 05/22/2008	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/576,502

Applicant(s)

MARCACCI, MAURIZIO

Examiner

DREW J. BROWN

Art Unit

3616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 4/24/08 (response to restriction req.).
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 4, 7, 8, 12, 13 and 15-17 is/are pending in the application.
- 4a) Of the above claim(s) 2, 3, 5, 6, 9-11, 14, and 18-28 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 4, 7, 8, 12, 13, 15 and 16 is/are rejected.
- 7) ☒ Claim(s) 17 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 April 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-846)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of Species 6 in the reply filed on 4/24/08 is acknowledged. The traversal is on the ground(s) that PCT Rule 13.1 does not mention unity of invention as between different species of a generic invention. This is not found persuasive. Because claim 1 is not allowable as discussed below, the special technical features do not lie in the generic independent claim; rather, they lie in the dependent claims. Therefore, the group of inventions are not linked so as to form a single general inventive concept..

The requirement is still deemed proper and is therefore made FINAL.

Claim Objections

2. Claims 1, 4, 7, 8, 12, 13, and 15-17 are objected to because of the following informalities:

In each claim, "characterized" should be changed to --characterized--.

In each claim, a period should be placed after the number of the claim.

In line 11 of claim 1, "said two cross members" should be changed to --said at least two cross members--.

In line 13 of claim 1, "vehicle said" should be changed to --vehicle, said--.

In line 14 of claim 1, "at its ends" should be changed to --at their ends--.

Claim 7 depends from claim 2, but claim 2 has been canceled. The claim has been examined as if it depends from claim 1 instead.

In line 6 of claims 13 and 15, "rod" should be changed to --rods--.

In line 7 of claims 13 and 15, "element" should be changed to --elements--.

In line 4 of claim 17, "through said hinge" should be changed to --through one of said at least two hinges--.

The Examiner also notes that claims 13 and 15 are identical and that one should be canceled.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 8, 12, 13, and 15-17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
5. Claim 8 recites the limitation "said central hinge" in line 4. There is insufficient antecedent basis for this limitation in the claim.
6. Claim 8 recites the limitation "said end hinge" in line 5. There is insufficient antecedent basis for this limitation in the claim.
7. The limitation "at least one cylindrical hinge" as recited in line 3 of claim 16 renders the claim indefinite because it is unclear whether it is the same cylindrical hinge as recited in claim 15.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 1 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cocco et al. (U.S. Pub. No. 2002/0190494 A1) in view of Sato et al. (U.S. Pat. No. 4,360,224).

Cocco et al. disclose a four-wheeled vehicle (paragraph 54) with two steered front wheels comprising a frame (14), two rear wheels and a front suspension group (Figure 4) that acts upon the two front wheels characterized in that the front suspension group allows the rolling of the vehicle and comprising at least two shock absorbers (60A and 60B), at least two horizontal cross members (20-23) connected through at least two hinges (52-54) to the frame and at least two vertical suspension elements (24, 25) firmly connected to the at least two cross members so as to form an articulated quadrilateral for the rolling of the vehicle, the horizontal cross members

being connected at their ends to the vertical suspension elements through hinge elements (30-33). At least one of the horizontal cross members is made in two elements connected to the frame (Figure 4).

Cocco et al. disclose the claimed invention as discussed above but does not disclose handlebars to steer the vehicle. Sato et al., however, does disclose handlebars (Figure 1) used to steer two front wheels. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the invention of Cocco et al. in view of the teachings of Sato to use handlebars to steer the front wheels, since it has been held that substituting handlebars for a steering wheel would yield the predictable result of allowing the driver to maneuver the vehicle.

10. Claims 1, 4, 7, 8, 12, 13, 15, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Apariclo et al. (U.S. Pat. No. 6,286,846 B1) in view of Dovison (GB 2279047 A).

Apariclo et al. disclose a four-wheeled vehicle (column 1, line 15) with two steered front wheels comprising a frame (Figure 5B), two rear wheels, handlebars (41), and a front suspension group (Figure 5A) that acts upon the two front wheels characterized in that the front suspension group allows the rolling of the vehicle and comprising at least two horizontal cross members (11 as shown in Figure 5A, and 51) connected through at least two hinges (Figure 5B) to the frame and at least two vertical suspension elements (Figure 5A) firmly connected to the at least two cross members so as to form an articulated quadrilateral for the rolling of the vehicle, the horizontal cross members being connected at their ends to the vertical suspension elements through hinge elements (Figure 5B). At least one of the horizontal cross members is made in two elements connected to the frame (Figure 5A), and each half arm of the lower cross member extends from a central hinge to an end hinge (Figure 5A). At least one upper connecting rod (15) connects the upper cross member to each vertical suspension element (Figure 5A), and at least one cylindrical hinge connects the connecting rods to the upper cross member (Figure 5B).

Although Apariclo et al. disclose that shock absorbers could be used in an automobile (column 8, lines 1-2), Apariclo et al. does not specifically disclose at least two shock absorbers. Dovison, however, does disclose two shock absorbers (Figure 32a). Dovison also discloses that

each of the vertical suspension elements has an arched shape (Figure 3) suitable for at least partially surrounding the front wheel to reduce the transversal bulk of the vehicle. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the invention of Aparicio et al. in view of the teachings of Dovison to have shock absorbers in order to provide a more comfortable ride for the occupants. It would have been obvious to form the vertical suspension elements to have an arch shape since a mere change in shape of an element is a matter of design choice.

Aparicio et al. also does not disclose that ball joints connect the connecting rods to the vertical suspension elements, and that at least one cylindrical hinge connects the connecting rods to the shock absorber. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use ball joints as the articulate joints (49) shown in Figure 5B since it was well known in the art that ball joints are a form of articulated joints and one of ordinary skill in the art would appreciate that ball joints would yield the predictable result of allowing movement of the connecting rod about the vertical suspension element. Also, it would have been obvious to use a hinge to connect the connecting rods to the shock absorbers since it was well known in the art that cylindrical hinges are used to provide an articulated connection between elements and one of ordinary skill in the art would appreciate that a cylindrical hinge would yield predictable results.

Allowable Subject Matter

11. Claim 17 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Seki et al., Salmon, Sato et al., Blondelet et al., Fujita et al., and DE 20101192 disclose similar vehicles.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DREW J. BROWN whose telephone number is (571)272-1362. The examiner can normally be reached on Monday-Thursday from 8 a.m. to 4 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lesley D. Morris can be reached on 571-272-6651. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Drew J. Brown
Examiner
Art Unit 3616

db
5/13/08
/Ruth Ilan/
Primary Examiner, Art Unit 3616